COMPARISON OF MENTAL SKILLS AND BODY IMAGE OF NATIONAL LEVELFOOTBALL PLAYERS AT DIFFERENT PLAYING POSITIONS

SHORT SYNOPSIS

Submitted in partial fulfillment of the requirement of the degree of

DOCTOR OF PHILOSOPHY

to

Lakshmibai National Institute of Physical Education

(Deemed to be University)

By

Akash Vishwakarma

PH 2016 -149

Under the supervision of

Dr. PulenDas

Assistant Professor, Faculty of Physical Education

Faculty of Physical Education

Lakshmibai National Institute of Physical Education

Shaktinagar, Racecourse Road, Gwalior, Madhya Pradesh, 474002

CERTIFICATE

I hereby declare that the short synopsis **"Comparison of Mental Skills And Body Image Of National Level Football Players At Different Playing Positions"** being submitted in partial fulfillment of the requirement for the degree of Doctor of Philosophy in Physical Education under faculty of PhysicalEducation of Lakshmibai National Institute of Physical Education,Gwalior during the academic year 2023-2024.

It is a bonafide record of original work carried out under the supervision of Dr. Pulen Das and has not been submitted in full or part to any other university or institute for a degree or diploma. Further, it is certified that the short synopsis is plagiarism-free and the proof has been submitted.

(AKASH VISHWAKARMA)
PH 2016 -149

Dr. Pulen Das
Supervisor (Assistant Professor)
Faculty of Physical Education

ABSTRACT

This study aims to explore and compare the mental skills and body image perceptions among national-level under-17 male youth football players, with a focus on positional differences within the sport. A total of 80 athletes, equally categorized into four playing positions—defenders (n=20), midfielders (n=20), attackers (n=20), and goalkeepers (n=20)—participated in the research. To assess mental skill development and body image perception, two standardized tools were employed: the Ottawa Mental Skills Assessment Tool (OMSAT-3) and the Multidimensional Body-Self Relations Questionnaire (MBSRQ), respectively. The OMSAT-3 provided a comprehensive evaluation of psychological skills across three core domains: foundation skills, psychosomatic skills, and cognitive skills. Meanwhile, the MBSRQ was used to assess various dimensions of body image, including appearance evaluation, fitness orientation, and health perception. Participants were gathered in a quiet, distraction-free environment within their respective training centres. Clear instructions were provided regarding the purpose of the study and the manner of answering the questionnaires. Both tools were administered in a single session lasting approximately 45–60 minutes. For better understanding and accuracy, verbal explanations were given in the players' preferred language when necessary. All responses were collected anonymously to promote honesty and reduce response bias. The completed questionnaires were then coded and prepared for statistical analysis. Descriptive and inferential statistical analyses were employed to evaluate differences between groups.

Keywords*:*Body Image, Mental Skills, Football, National

CONTENTS

S r.No.	Chapters	Page No
Chapter 01	Introduction	1-10
Chapter 02	Literature Review	11-16
Chapter 03	Research Methodology	17-21
References	References	22-27

1.0 INTRODUCTION

Numerous earlier studies have concentrated on the physical training needs of various roles in the game. However, athletes need particular mental qualities in order to compete at a high level; physical prowess is insufficient. Being physically gifted is no longer sufficient for success at the greatest levels of soccer play in the modern day. Soccer is a difficult sport to excel in, requiring precise motor and mental coordination abilities. Both on and off the field, high stress levels or poor coping mechanisms can lead to changes in cognitive evaluation and concentration that may affect how well a person performs physically by changing their muscle tension and coordination. Performance is influenced by mental state just as much as it is by tactical and technical abilities. For this reason, it ought to have the same significance. Football, which is also known as Soccer, is probably world‘s most popular sport, Played in practically every nation at varying levels of competence. Football may be Played competitively or for fun, as a career, a means of keeping fit or simplya recreational pursuit (Reilly, 1997). Soccer is the most popular sport in the world because it is performed by men and women, children and adults with different levels of expertise. Success in football is dependent upon a variety of factors, including the Physical characteristics and physiological capacities of the players, their level of skill, Motivation, and tactics employed by them against the opposition. Success in soccer is Dependent upon a variety of factors, including the physical characteristics and Physiological capacities of the players, their level of skill, motivation, and tactics employed by them against the opposition.

Mental skill

In the past few years, athletes have primarily requested to discuss the significance of psychology for competitive performance, and each time, they have all expressed support for it. Many trainers and players are unaware of the precise steps involved in developing psychological components for more efficient training and improved competition readiness. The primary goal of mental skill development is to create an easily readable manual that coaches and players can utilize to enhance the psychological components of performance. It is evident that an athlete's daily life and psychological makeup may differ significantly from one another. If that is untrue, then every international athlete has the opportunity to compete. Mental skills are the set of trainable abilities and methods that are held to underpin successful learning and performance. These are also known as cognitive or psychological skills (Gucciardi et al., 2009). Similarly, some studies indicated that the use of mental skills such as goal setting, imagery, relaxation, and self-talk are important areas in the field of sport psychology ((Vealey, 2007a). They also asserted that goal setting as attaining a specific standard of proficiency on a task, usually within a specified time limit can increase performance during competition. Moreover, imagery as using all the senses to re-create or create an experience in the mind helps athletes to perform better and increase self-confidence (Rattanakoses et al., 2009).

Body image

Body image refers to a multidimensional construct that involves perceptions and attitudes towards oneself that are related to one's body, including thoughts, beliefs, feelings, and behaviors. It usually incorporates body size estimation, body attractiveness, and emotions associated with body shape and size(Ganesan et al., 2018) body image is a complex and multifaceted issue that can impact football players' physical and mental well-being. By promoting acceptance, inclusivity, and holistic well-being within football culture, teams and organizations can support players in developing a positive body image and thriving both on and off the field. Body image concerns can affect players across all playing positions in football, the specific nature and focus of these concerns may vary based on the physical attributes and performance expectations associated with each role. It's essential for players to develop a healthy body image and focus on functional fitness, performance, and overall well-being, rather than solely on external appearance. Additionally, creating a supportive team environment that promotes acceptance and inclusivity can help mitigate the negative impact of body image concerns on players' mental health and performance.

1.2 STATEMENT OF THE PROBLEM

The purpose of this study will be to comparison of mental skills and body image of national-level football players at different playing position.

1.3 OBJECTIVES OF THE STUDY

The objective of the study is to: -

1. To find out whether the national football players are playing in different Positions differed in the selected mental skill variables.
2. To find out whether the national football players are playing in different Positions differed in the body image chosen variables.

1.4 DELIMITATION:

The study will be conceptualized with a very specific purpose for selected Subjects.The research scholar confined this study to the following areas:

1. The study will be delimited to 80 national football players from different playing positions.
2. The total no. of players will be sub divided into four groups based on their playing positions further each group will be having 20 each. (Attacker, Midfielder, Defender, Goalkeeper)
3. Their age was between 15-17 years.
4. The study will be delimited to the following mental skills sub variables will beselected under three parameters.

    a) Fundamental skill
    b) Psychosomatic skill
    c) Cognitive skill

5. The study will be delimited to the following body image sub scalewere selected:
    a) Appearance evaluation
    b) b) Appearance orientation
    c) c) Body area satisfaction
    d) d) Self classified weight

e) e) Over weigh preoccupation

1.5. LIMITATION

1. Questionnaire research has its limitations, any bias that might enter into the subject's response on this account is considered as a limitation to this study.

2. Life style of the subject is beyond the control of researcher. Hence socio-economic and religious factors, which cannot be controlled by the scholar, might affect the responses of the students; these are considered as limitations for this study.

1.6 HYPOTHESIS

On the basis of the literature gone through, research findings and the scholars understanding of the problem, following hypothesis are formulated.

H1: There will be a significant difference in mental skills based on the different playing positions.

H2: There will be a significant difference in body image based on different playing positions.

1.7 DEFINITIONS AND EXPLANATIONS OF TERMS

Mental skills

Mental skills are essential for football players to excel both on and off the field. These skills encompass a range of psychological attributes and abilities that contribute to players' performance, resilience, decision-making, and overall well-being.

1. Basic skills

Basic skills for football players encompass a range of mental abilities and techniques that are fundamental for performance, resilience, and overall well-being on the field.

A) Goal setting

Goal setting is the process by whichindividual establish objectiveor goals that provide players and teams with a direction to achieve the end result.

B) Confidence

Confidence in psychology refers to a person's belief in their own abilities, judgments, and decisions. Confidence plays a crucial role among various playing position in football which influencing their performance, decision-making and impact on the outcome of the match.

C) Commitment

Commitment refers to an athlete’s consistent dedication, motivation, and persistence toward their training, goals, and performance, even in the face of obstacles or setbacks. Football players, is the unwavering dedication to training, improvement, and team goals.

2. Psychosomatic skills

Psychosomatic refers to the interaction between the mind (psyche) and the body (soma). Psychosomatic skills play a crucial role in football by influencing players' mental and emotional states, which in turn impact their physical performance, decision-making, and overall well-being on the field.

A) Stress reaction

Stress reactions in football refer to the physical, emotional, and cognitive responses that players experience when they encounter stressful or high-pressure situations during matches or in preparation for games.

B)Fear control

Fear control in football players refers to the ability to manage and regulate feelings of fear or anxiety that may arise in high-pressure situations during matches or training. Football players often encounter situations that can trigger fear, such as facing skilled opponents, taking penalty kicks, or playing in front of large crowds.

C) Relaxation

Relaxation techniques are valuable tools for football players to manage stress, anxiety, and physical tension, promoting optimal performance and well-being both on and off the field.

D) Activation

The process of preparing oneself mentally and physically to perform optimally in a given task or Situation. It involves activating the necessary psychological and physiological states to achieve peak performance. The role of activation among different playing positions in football is crucial, as it can influence players' readiness, performance, and decision-making on the field.

3. Cognitive skills

Cognitive skills play a crucial role in football, as they encompass the mental abilities and processes that allow players to perceive, process, and respond to information on the field effectively. These skills are essential for decision-making, spatial awareness, anticipation, and problem-solving during matches.

A) Focus

Focus is a critical mental attribute for football players, as it enables them to maintain concentration, make quick decisions, and execute skills effectively during matches.

B) Refocus

Refocusing is a crucial skill for football players that allows them to regain concentration, redirect their attention, and overcome distractions or setbacks during matches. Football is a dynamic and fast-paced sport, and players often need to refocus quickly after moments of adversity or loss of concentration.

C) Imagery

Imagery, also known as mental imagery or visualization, is a powerful cognitive skill that plays a significant role in the performance. Football players use imagery to mentally rehearse and visualize those performing specific skills and techniques, such as dribbling past opponents, making accurate passes, or taking shots on goal.

D) Mental practice

Mental practice refers to the cognitive rehearsal or simulation of physical actions, strategies, and scenarios in the mind without physically performing them. In football, mental practice involves mentally rehearsing skills such as passing, shooting, dribbling, and decision-making, as well as visualizing oneself performing well during a match.

E) Competitionplanification

Competition planning in psychology involves developing strategies and techniques to help individuals prepare mentally and emotionally for competitive events. Competition planning in football involves a strategic approach to prepare players physically, tactically, and

mentally for matches. This planning should be tailored to the specific roles and responsibilities of players across different positions.

4. Body image

Body image refers to how individuals perceive, think, and feel about their own bodies. In football the perceptions, attitudes, and feelings that football players have about their own bodies. It encompasses how players perceive their physical appearance, size, shape, and abilities in relation to societal standards, performance expectations, and personal ideals.

1. Appearance orientation

Appearance orientation in football refers to the extent to which players prioritize and value their physical appearance about their performance, confidence, and overall well-being in the sport. It can influence players' attitudes, behaviors, and experiences both on and off the field.

2. Body area satisfaction

Body area satisfaction refers to individuals' satisfaction with specific aspects or parts of their bodies. In the context of football, body area satisfaction can vary among players depending on their playing positions, physical demands, and performance expectations.

3. Self-classified weight

Body image refers to how individuals perceive and categorize their own bodies. Weight in relation to perceived societal norms or standards. Self-classified weight among football players can vary depending on their playing position, as different positions may have different physical demands and body types.

4. Overweight preoccupation

Concerns about weight and body composition can manifest differently among players in different playing positions in football. While all players may face pressure to maintain a certain level of fitness and athleticism, the specific demands of each position can influence how weight preoccupation is perceived and managed.

5. Appearance evaluation

Refers to the way individuals perceive and judge their own physical appearance. The assessment and judgment of players based on their physical appearance, including aspects such as body size, shape.

1.8 NEED AND SIGNIFICANCE OF THE STUDY

1. The study will help to know and understand the present mental status of the nationalfootballplayers among various playing positions.
2. Besides, it will help the coaches and managers to better understand the players and, in turn, be able to bring out the best performance from them.
3. The study will aid the players themselves to know their own mental strengths and weaknesses and work on them accordingly to be able to give their best performance every time they enter the field.
4. The youth players will benefit the most from this study as they will know what level of mental skills is required to play at the professional level.

5. The findings of the study will also provide the knowledge to control and minimize the detrimental effect of all these selected psychological variables in training of the players among various playing position.

2 REVIEWOF LITERATURE

Goswami et al. (2016) compared the psychological characteristics (aggression, self-confidence, and achievement motivation) between different playing positions in football. Forty-five male football players (aged 18 to 25) who participated in all-India football competitions were divided into three groups, consisting of 15 players in each group (defenders, midfielders, and forwards). the study was conducted by using a valid questionnaire and statistical analysis (ANOVA and LSD post-hoc test). The result showed that defenders have the highest self–confidence, while forwards scored higher in aggression and achievement motivation. No significant difference was noticed between defenders and midfielders across the variable. The results suggest that psychological characteristics differ according to positional demands, pondering the specific roles and responsibilities associated with different playing positions in football.

Najah et al. (2015) explored in this study the psychological skill differences among 180 male Tunisian youth soccer players (ages 15-19) from different clubs of the 1st and 3rd youth class divisions, who were divided into three groups, consisting of 60 players in each

group (defenders, midfielders, and forwards). Using the Ottawa Mental Skills Assessment Tool (OMSET-3), twelve psychological skills were evaluated. The results showed that the hypothesis of positional differences shows forward dominance in motivation, confidence, and activation; defenders are superior in relaxation; and midfielders showed the lowest scores across most of the psychological skills levels. The findings show that psychological skills differ according to different playing positions, underscoring the importance of adapting mental training to positional play. These insights can guide coaches in developing position-specific psychological interventions to improve the overall performance of players.

Abdullah et al. (2016) explored in this study the role of psychological factors on the performance of the elite soccer players in the Malaysian Super League (average age 25) With the help of PSIS -R5 questionnaire, players were evaluating on motivation, confidence, anxiety control, mental preparation, team emphasis, concentration, and cognition. Performance was tracked over eight weeks and analyzed by using multiple regression. Although psychological factors showed a strong correlation with player performance. the findings show that psychological attributes play an important role, but they are not the sole contributors to success at the elite level.

Jooste et al. (2014) investigate the psychological skill profiles of African youth soccer players among various playing positions, which consist of 152 male players aged 14 to 18 from 10 African nations who participated in the 2010 Copa Coca-Cola tournament, while also assessing the relationship between skills and overall team performance. By using the Bull's Mental Skills Questionnaire and the Athletic Coping Skills Inventory-28 (ACSI-28) to evaluate mental skills with the help of a cross-sectional survey design. Findings show no

significant difference in psychological skill based on playing position. Concentration appears as the solo psychological skill linked to the performance outcome. The team ranked in the middle show's better relaxation than both the top-performing and low-performing ranked teams. This study did not support the commonly accepted psychological skill demands varying by position or a positive relationship between psychological skill and team success.

Asamoah et al. (2016) conducted a study to determine the psychological variables that vary across different playing positions among 263 university-level soccer players (mean age: 22 years). Participants are based on different playing positions (goalkeeper, defender, midfielder, or forward). By using three assessment tools—the Sports Mental Toughness Questionnaire (SMTQ), the Athletic Coping Skills Inventory-28 (ACSI-28), and the Group Environment Questionnaire (GEQ). For statistical analysis, one-way ANOVA with post-hoc testing was employed. The study findings show defenders scored higher than midfielders on the subscale of mental toughness, while midfielders showed more control compared to defenders and forwards. No significant difference was observed in the various positions across the seven coping skill dimensions. However, the goalkeeper and defenders reported higher scores on the group integration task than midfielders. These findings suggest that social factors and psychological factors can vary by playing position, emphasizing the need for position-specific mental skills training to enhance team cohesion.

Zaccagni et al. (2023), in a systematic review and meta-analysis report, highlight the rising concerns over body image dissatisfaction (BID) in athletes, mainly influenced by sport-specific performance models. A systematic review examined this issue across 15 studies, selected from an initial pool of 887 articles, encompassing a total of 2,412 athletes. In the

past decade, up to September 2022, published studies were included to evaluate body image based on body figure drawings and anthropometric assessments. For observational research, quality assessment was conducted by using the Newcastle–Ottawa scale. Using thematic analysis, four main factors influencing BID were identified: gender, type and level of sports, and weight status. Findings show a moderate effect size for gender, with female athletes experiencing higher BID than males, and a small effect size for weight status, where normal-weight females reported higher dissatisfaction than those who are underweight. These findings show that both social expectations and pressure from sports affect how athletes feel about their bodies.

Liechty et al. (2015) explored the body image experience of women who participated in tackle football in Western Canada, semi–structured interviews with 15 women players to investigate their body image experiences. Data analyzed through the thematic and objectification theory revealed three key themes: a) the ongoing negotiation of body image both on and off the field; b) enhanced body image resulting from physical transformation and a growing appreciation for body functionality over appearance; c) the positive influence of a team environment that embraced body diversity. Findings show that places where people can be active in their free time, that are friendly, supportive, and that help people feel better about their health and well-being.

Abis et al. (2022) investigated how playing position influences psychological traits among male and female amateur football players. For statistical analysis using the Aggression Inventory by Kiper and the Self-Confidence Scale by Akin (2007), the study revealed significant positional variation in self-confidence levels in both genders. Male players are dominant in internal, external, and general self-confidence regardless of position, whereas

female players show a moderate level of internal and general self-confidence, in which self-confidence remains high. In aggression, male players show a significant difference in various positions, with overall position defenders being the most aggressive. However, in female players, no such significant difference was observed. Findings of this study emphasize the role of playing position and gender in shaping psychological profiles in amateur football players.

Pettersen et al. (2022) investigate the psychological components that influence female players' performance. A recent systematic review integrates findings from 14 qualitative studies involving 1,449 participants, aiming to clarify the relationship between psychological factors and performance in women's football players. This review identified 15 psychological variables, with results showing that higher-level players exhibit greater mental toughness and conscientiousness, along with lower anxiety levels, which enable them to perform better. Additionally, enjoyment and acclimatization help to perform well. Findings highlight the significant role of psychological factors in the performance of elite female football players.

Klatt et al. (2021) studied the comparison of position-specific attentional skills differences between defensive and offensive football players. This study consists of a series of experimental investigations examining the role of inattentional blindness among the different playing positions in football. Across three experiments, findings repeatedly show that offensive players, especially strikers and offensive midfielders, were more able to notice unexpected objects compared to their defensive position in football. In a general visual task, strikers unveiled higher noticing rates, while a specific football task involving unmarked players in a tactical situation shows higher perceptual awareness in offensive

players. This study highlights the position-specific cognitive advantages and emphasizes the importance of perceptual and decision-making training to improve positional play in football.

Ivarsson et al. (2020) conducteda systematic review that analyzed factors predicting structure performance outcomes in football, progression to elite levels, or improved game tactics. This review encompasses 11 studies, reporting a total of 39 effect sizes, and reveals that variables such as task orientation, perceptual-cognitive abilities, and task-oriented coping strategies show a small but positive association with future performance. However, due to methodological limitations, the certainty of this evidence remains low. The findings emphasize the need for more rigorously designed longitudinal research to help understand the role of psychological factors in the development of football talent.

Khan, Zamirullah et al. (2013) explored the influence of psychological factors on athletic performance among 54 male soccer players, aged 17 to 21, who were participating in state and All-India university-level tournaments. The standardized questionnaire was used to evaluate self-concept and body image, and statistical analysis was conducted using Pearson's correlation and t-tests. results show no significant difference between the two groups, suggesting that perceptions of self and body image were similar for players at both levels. The Findings emphasize the need for further research to explore other psychological factors that influence performance among athletes.

3METHODOLOGY

This chapter included the tentative methodology like selection of subjects, selection of variables, criterion measures, and procedure for collection of data and statistical techniques which will be used for conducting research.

3.1 SELECTION OF SUBJECTS

A total of eighty (80) male footballers will be chosen randomly from the participating teams before the AIFF Youth League tournament, which will be conducted by the All-India Football Federation. The age of the subject will be 15 to 17 years old. The total number of Students will be subdivided into four groups based on their playing positions; further, each group will have 20 each. The structure is given below.

Table 01: Structure of Selection of Subjects

Playing position	Attacker	Midfielder	Defender	Goalkeeper
Subjects in each group	20 sub	20 sub	20 sub	20 sub
Age of subjects	15-17 years	15-17 years	15-17 years	15-17 years
Level of playing	National	National	National	National
Sources	U17 youth league	U17 youth league	U17 youth league	U17 youth league

3.2 SELECTION OF VARIABLES

To assess the mental skills of the footballer following sub-variables will be selected under three parameters. Such as:

A) Fundamental skill

1. Goal setting
2. Confidence
3. Commitment

B) Psychosomatic skills-

1. Stress reaction
2. Fear control
3. Relaxation
4. Activation

C) Cognitive skill

1. Focus
2. Refocus
3. Imagery
4. Mental practice
5. Competition planification

- To assess Body Images of the footballer following subscales will be selected:

  -**Five Subscales of Body Images**

  1. Appearance evaluation
  2. Appearance orientation
  3. Body area satisfaction
  4. Self-classified weight
  5. Overweight preoccupation

3.3 CRITERION MEASURES

01. Mental skills		Name of Tools
A) Fundamental skill	Standard Questionnaire	Ottawa mental skill assessment tool (OMSAT-3) (Durand-Bush et al., 2001)
B) Psychosomatic skills		
C) Cognitive skills		
02. Body image	Standard Questionnaire	The Multidimensional Body-Self Relations Questionnaire (MBSRQ)(Cash, 2000).

3.4 Administration of Test Items:

Different teams participating in the under-17 youth league and professional will be contacted, briefed, and requested to administer the test items to their teams separately. The players, too, will be briefed before the start of data collection about the purpose of the research and also assured of the confidentiality of the information provided by them. They

will be given clear and detailed instructions regarding the questionnaires. Both Questionnaires, along with the demographic sheet, will then be administered to the players. The subjects will be encouraged and prompted to give genuine responses to the test statements.

3.4.1 Ottawa mental skills assessment tool – 3 (OMSAT-3)Purpose: -The Ottawa Mental Skills Assessment Tool (OMSAT) is a questionnaire designed to assess athletes' mental skills related to sport performance. The OMSAT was created by Dr. John H. Salmela, Jordache Bota and Natalie Durand-Bush, in collaboration with Stuart Barbour, Jennifer Cox, Steve Howlett, Kyoko Imaj and Wang Run Ping, School of Human Kinetics, University of Ottawa, 1992.

Procedure: -

The OMSAT-3 included 85 items and 12 mental skill scales grouped under three major mental areas, each consisting of a number of mental skills:

Foundation skills (confidence, motivation and goal setting),

Psychosomatic skills (stress reaction, fear control, relaxation and activation) and

Cognitive skills (focusing, refocusing, imagery, mental practice and competition planification).

The athlete's response is given on a 7-point Likert type scale ranging from "Strongly disagree" [1] to "Strongly agree" [7]. The score is seen as a high value when it is 6 or 7, medium or moderate between 3 to 5 and low if it is 1 or 2.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Somewhat Disagree

- 4 = Don't Agree / Don't Disagree
- 5 = Somewhat Agree
- 6 = Agree
- 7 = Strongly Agree

3.4.2. Multidimensional body self-relations questionnaire (MBSRQ). Purpose: The Multidimensional Body-Self Relations Questionnaire (MBSRQ) is a 69-item self-report inventory for the assessment of self-attitudinal aspects of the body-image developed by Thomas F. Cash to assess various aspects of body image and body-related attitudes. The MBSRQ has undergone several revisions, with the 3rd edition being released in 2000.

Procedure: -

The MBSRQ consists of multiples of subscales, each addressing different aspects of body image. These scales typically include following subscales will be selected: -

1. Appearance evaluation
2. Appearance orientation:
3. Body areas satisfaction scale
4. Overweight preoccupation
5. Self-classified weight

The athlete's response is given on a 5-point Likert type scale ranging from "definitely disagree" [1] to "definitely agree" [5].

- 1 = definitely Disagree
- 2 = mostly Disagree
- 3 =neither agree nor disagree
- 4 = mostly Agree

- 5 = definitely Agree

3.5 STATISTICAL TECHNIQUES

The purpose of the study is to explore variations in mental skills and body image among various football positions.To begin with, fundamental descriptive statistics like mean and standard deviation will be used to present an overview of the collected data. Following this, the selection of appropriate inferential methods, such as ANOVA, MANOVA, and other appropriatenon-parametric tests, will be based on the data distribution and scale characteristics. If applicable, techniques like correlation or regression analysis may be employed to investigate relationships between variables. To ensure methodological appropriateness, the initial screening of the data will inform the final selection of statistical tools.

REFERENCE

Andrew, M., Grobbelaar, H. W., & Potgieter, J. C. (2007). Sport psychological skill levels and related psychosocial factors that distinguish between rugby union players of different participation levels. South African Journal for Research in Sport, Physical Education and Recreation, 29(1), 1–14. https://doi.org/10.10520/EJC108850.

Aufenanger, S. J. (2005). Relationships between mental skills and competitive anxiety interpretation in open skill and close skill athletes [Miami University].https://etd.ohiolink.edu/acprod/odb_etd/etd/r/1501/10?clear=10&p10_accession_num=miami1117130981

Liechty, T., Sveinson ,Katherine, Willfong ,Fleesha, & and Evans, K. (2015). 'It Doesn't Matter How Big or Small You Are…There's a Position For You': Body Image Among Female Tackle Football Players. Leisure Sciences, 37(2), 109–124. https://doi.org/10.1080/01490400.2014.980591

Psychological factors and performance in women's football: A systematic review—Pettersen—2022—Scandinavian Journal of Medicine & Science in Sports—Wiley Online Library. (n.d.). Retrieved April 13, 2025, from https://onlinelibrary.wiley.com/doi/full/10.1111/sms.14043

Cash, T. F. (2000). Body image. American Psychological Association. https://psycnet.apa.org/record/2004-12755-161

Khan, Z., Khan, S., & NASEEM AHMAD KHAN. (2013). A STUDY ON BODY IMAGE AND SELF-CONCEPT OF SOCCER PLAYERS. https://doi.org/10.6084/m9.figshare.654608.v1

Durand-Bush, N., Salmela, J. H., & Green-Demers, I. (2001, March 1). The Ottawa Mental Skills Assessment Tool (OMSAT-3). | Sport Psychologist | EBSCOhost. https://doi.org/10.1123/tsp.15.1.1

Feltz, D. L., & Ewing, M. E. (1987). Psychological characteristics of elite young athletes. Medicine and Science in Sports and Exercise, 19(5 Suppl), S98-105.

Ganesan, S., Ravishankar, S. L., & Ramalingam, S. (2018). Are Body Image Issues Affecting Our Adolescents? A Cross-sectional Study among College Going Adolescent Girls. Indian Journal of Community Medicine, 43(Suppl 1), S42. https://doi.org/10.4103/ijcm.IJCM_62_18

Keeton, W. P., Cash, T. F., & Brown, T. A. (1990). Body Image or Body Images?: Comparative, Multidimensional Assessment Among College Students. Journal of Personality Assessment, 54(1–2), 213–230. https://doi.org/10.1080/00223891.1990.9673988

Abiş, S., Yılmaz, C., & Mayda, M. H. (2022). DOES POSITION HAVE AN EFFECT ON SELF-CONFIDENCE AND AGGRESSION LEVELS IN AMATEUR FOOTBALL PLAYERS? European Journal of Social Sciences Studies, 6(5), Article 5. https://doi.org/10.46827/ejsss.v6i5.1206

Lizana-Calderón, P., Alvarado, J. M., Cruzat-Mandich, C., Díaz-Castrillón, F., & Quevedo, S. (2023). Psychometric Properties of the Multidimensional Body–Self Relations Questionnaire—Appearance Scales (MBSRQ-AS) in Chilean Youth. International JournaZaccagni, L., &Gualdi-Russo, E. (2023). The Impact of Sports Involvement Body Image Perception and Ideals: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health, 20(6), 5228. https://doi.org/10.3390/ijerph20065228

Najah, A., & Rejeb, R. B. (2015). The Psychological Profile of Youth Male Soccer Players in Different Playing Positions. Advances in Physical Education, 5(3), Article 3. https://doi.org/10.4236/ape.2015.53020

Zaccagni, L., &Gualdi-Russo, E. (2023). The Impact of Sports Involvement on Body Image Perception and Ideals: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health, 20(6), 5228. https://doi.org/10.3390/ijerph20065228.

Andrew, M., Grobbelaar, H. W., & Potgieter, J. C. (2007). Sport psychological skill levels and related psychosocial factors that distinguish between rugby union players of different participation levels. South African Journal for Research in Sport, Physical Education and Recreation, 29(1), 1–14. https://doi.org/10.10520/EJC108850.

Aufenanger, S. J. (2005). Relationships between mental skills and competitive anxiety interpretation in open skill and close skill athletes [Miami University].https://etd.ohiolink.edu/acprod/odb_etd/etd/r/1501/10?clear=10&p10_accession_num=miami1117130981.

Liechty, T., Sveinson ,Katherine, Willfong ,Fleesha, & and Evans, K. (2015). 'It Doesn't Matter How Big or Small You Are…There's a Position For You': Body Image Among Female Tackle Football Players. Leisure Sciences, 37(2), 109–124. https://doi.org/10.1080/01490400.2014.980591

Psychological factors and performance in women's football: A systematic review—Pettersen—2022—Scandinavian Journal of Medicine & Science in Sports—Wiley Online Library. (n.d.). Retrieved April 13, 2025, from https://onlinelibrary.wiley.com/doi/full/10.1111/sms.14043

Cash, T. F. (2000). Body image. American Psychological Association. https://psycnet.apa.org/record/2004-12755-161

Khan, Z., Khan, S., & NASEEM AHMAD KHAN. (2013). A STUDY ON BODY IMAGE AND SELF-CONCEPT OF SOCCER PLAYERS. https://doi.org/10.6084/m9.figshare.654608.v1

Durand-Bush, N., Salmela, J. H., & Green-Demers, I. (2001, March 1). The Ottawa Mental Skills Assessment Tool (OMSAT-3). | Sport Psychologist | EBSCOhost. https://doi.org/10.1123/tsp.15.1.1

Feltz, D. L., & Ewing, M. E. (1987). Psychological characteristics of elite young athletes. Medicine and Science in Sports and Exercise, 19(5 Suppl), S98-105.

Ganesan, S., Ravishankar, S. L., & Ramalingam, S. (2018). Are Body Image Issues Affecting Our Adolescents? A Cross-sectional Study among College Going Adolescent Girls. Indian Journal of Community Medicine, 43(Suppl 1), S42. https://doi.org/10.4103/ijcm.IJCM_62_18

Keeton, W. P., Cash, T. F., & Brown, T. A. (1990). Body Image or Body Images?: Comparative, Multidimensional Assessment Among College Students. Journal of Personality Assessment, 54(1–2), 213–230. https://doi.org/10.1080/00223891.1990.9673988

Abiş, S., Yılmaz, C., & Mayda, M. H. (2022). Does position have an effect on self-confidence and aggression levels in amateur football players? European Journal of Social Sciences Studies, 6(5), Article 5. https://doi.org/10.46827/ejsss.v6i5.1206

Lizana-Calderón, P., Alvarado, J. M., Cruzat-Mandich, C., Díaz-Castrillón, F., & Quevedo, S. (2023). Psychometric Properties of the Multidimensional Body–Self Relations Questionnaire—Appearance Scales (MBSRQ-AS) in Chilean Youth. International JournaZaccagni, L., &Gualdi-Russo, E. (2023). The Impact of Sports Involvement

on Body Image Perception and Ideals: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health, 20(6), 5228. https://doi.org/10.3390/ijerph20065228

Najah, A., & Rejeb, R. B. (2015). The Psychological Profile of Youth Male Soccer Players in Different Playing Positions. Advances in Physical Education, 5(3), Article 3. https://doi.org/10.4236/ape.2015.53020

Zaccagni, L., &Gualdi-Russo, E. (2023). The Impact of Sports Involvement on Body Image Perception and Ideals: A Systematic Review and Meta-Analysis. International Journal of Environmental Research and Public Health, 20(6), 5228. https://doi.org/10.3390/ijerph20065228

Asamoah, B., & Grobbelaar, H. W. (2016). Positional comparisons of mental toughness, psychological skills and group cohesion among soccer players psychology. African Journal for Physical Activity and Health Sciences (AJPHES), 22(31), 747–759. https://doi.org/10.10520/EJC195987

Vealey, R. S. (2007b). Mental skills training in sport. In Handbook of sport psychology, 3rd ed (pp. 287–309). John Wiley & Sons, Inc. https://doi.org/10.1002/9781118270011.ch13